

**BMP Owner maintenance schedule**

The following is a list of maintenance items and the frequency of when they need to be done. These items are recurring maintenance and separate from maintenance needed after inspection.

<b>BMP: Vegetated Channels, Wet and Dry Swales</b>	<b>Frequency</b>
<b>Initial Maintenance</b>	
Irrigate swale during dry season or when necessary.	As needed.
<b>Perpetual Maintenance</b>	
Mow grass to maintain a height of 3-4 inches. Litter should be removed prior to mowing. Clippings should be composted.	As needed, seasonally
Rake and remove fallen leaves and debris from deciduous trees and shrubs.	As needed, seasonally
Irrigate swale during dry season or when necessary.	As needed, seasonally
Provide weed control if necessary to control invasive species.	As needed
Remove litter, branches, rock blockages, and other debris and dispose of properly.	Semi-annually
Maintain inlet flow spreader (if applicable)	Semi-annually
Declog the pea gravel diaphragm	Annually or as needed
Correct erosion problems in the sand/soil bed of dry swales.	Annually or as needed
Remove all accumulated sediment that may obstruct flow through the swale. Sediment accumulating near culverts and in channels should be removed when it builds up to 3 inches at any spot, covers vegetation, or once it has accumulated to 10% of the original design volume. Replace the grass areas damaged in the process.	As needed
Rototill or cultivate the surface of the sand/soil bed of dry swales if the swale does not draw down within 48 hours.	As needed
<b>BMP: Filter Strip</b>	<b>Frequency</b>
<b>Initial Maintenance</b>	
Water plants daily for 2 weeks after construction.	Daily
<b>Perpetual Maintenance</b>	
Mow grass to maintain a height of 3-4 inches and to promote thick, dense vegetative growth. Litter should be removed prior to mowing. Cut only when soil is dry to prevent tracking damage, soil compaction and flow concentrations. Clippings should be composted.	As needed, seasonally
Rake and remove fallen leaves and debris from deciduous trees and shrubs.	As needed, seasonally
Remove litter, branches, rock blockages, and other debris and dispose of properly.	As needed
Maintain inlet flow spreader.	As needed
Irrigate swale during dry season or when necessary.	As needed, seasonally

Reseed and mulch void areas.	Semi-annually
Treat diseased trees and shrubs, remove dead vegetation.	Semi-annually
Remove all accumulated sediment. Sediment should be removed when it builds up to 3 inches at any spot, or covers vegetation.	Annually
Limit fertilizer applications based on plant vigor and soil test results.	Annually
Rework or replant buffer strip if concentrated flow erodes a channel through the strip.	As needed
Restore filter strip to original lines and grades.	Every 3-5 years
<b>BMP: Infiltration Basin</b>	<b>Frequency</b>
<b>Initial Maintenance</b>	
Repair any problem which could cause clogging.	As needed
Weed once monthly during the first two growing seasons.	Monthly, Seasonally
<b>Perpetual Maintenance</b>	
Stabilize eroded banks	As needed
Repair undercut and eroded areas at inflow and outflow structures.	As needed
Maintain access to the basin for regular maintenance activities.	As needed
Mow as appropriate for vegetative cover species.	As needed, seasonally
Monitor health of vegetation and replace as necessary.	As needed
Control mosquitoes as necessary.	As needed
Remove litter and debris from infiltration basin area as required.	As needed, semi-annually
Trim vegetation at the beginning and end of the wet season to prevent establishment of woody vegetation and for aesthetic and vector (ticks and mosquitoes) reasons.	Semi-annually
Replant eroded or barren spots to prevent erosion and accumulation of sediment.	Semi-annually
Clean out sediment traps, forebays, inlet/outlet structures, overflow spillway, and trenches if necessary.	Annually
Scrape bottom and remove sediment when accumulated sediment reduces original infiltration rate by 25-50%. Restore original cross-section and infiltration rate. Properly dispose of sediment.	Every 3-5 years
Disc or otherwise aerate bottom.	Every 3-5 years
Dethatch basin bottom.	Every 3-5 years
<b>BMP: Infiltration Trench</b>	<b>Frequency</b>
<b>Initial Maintenance</b>	
Repair any problem which could cause clogging.	As needed
Weed once monthly during the first two growing seasons.	Monthly, Seasonally
<b>Perpetual Maintenance</b>	
Repair undercut and eroded areas at inflow and outflow structures.	As needed

Remove sediment, debris, and oil/grease from pretreatment devices and overflow structure.	As needed
Remove trash, debris, grass clippings, trees, and other large vegetation from the trench perimeter and dispose of properly.	Semi-annually
Mow and trim vegetation to prevent establishment of woody vegetation, and for aesthetic and vector (mosquito and tick) reasons.	Semi-annually
Clean out sediment traps, forebays, inlet/outlet structures, overflow spillway, and trenches if necessary.	Annually
Remove grass clippings, leaves, and accumulated sediment from the surface of the trench. Replace first layer of aggregate and filter fabric if clogging appears only to be at the surface.	Annually
Clean trench when loss of infiltrative capacity is observed. If drawdown time is observed to have increased significantly over the design drawdown time, removal of sediment may be necessary. This is an expensive maintenance activity and the need for it can be minimized through prevention of upstream erosion.	Annually
Seed or sod to restore ground cover.	Annually
Total rehabilitation of the trench should be conducted to maintain storage capacity within 2/3 of the design treatment volume and 72 hour exfiltration rate limit.	Upon failure
Trench walls should be excavated to expose clean soil.	Upon failure
All of the stone aggregate and filter fabric or media must be removed. Accumulated sediment should be stripped from the trench bottom. At this point the bottom may be scarified or tilled to help induce infiltration. New fabric and clean stone aggregate should be refilled.	Upon failure
<b>BMP: Sand Filter</b>	<b>Frequency</b>
<b>Perpetual Maintenance</b>	
Remove trash and debris from the sedimentation basin, the riser pipe, and the filter bed as needed.	Monthly, or as needed
Remove trash from inlet grates to maintain the inflow capacity of the media filter.	As needed
Upstream vegetation should be maintained as needed. Remove grass clippings to prevent them from washing into the filter.	As needed
Clean filter surface semiannually or more often if watershed is excessively erosive.	Semiannually
Replace sorbent pillows	Semiannually
Repair or replace any damaged structural parts	Annually
Stabilize eroded areas	Annually

Remove accumulated sediment in the sedimentation chamber every 10 years or when the sediment occupies 10-20% of the basin volume or accumulates to a depth of six inches, whichever is less.	As needed
Remove top 2 inches of media filter and landfill if facility drain time exceeds 72 hours.	As needed
Restore media depth to 18 inches when overall media depth drops to 12 inches.	As needed
<b>BMP: Porous Pavement</b>	<b>Frequency</b>
<b>Initial Maintenance</b>	
Remove excess sediment from construction area and stabilize adjacent areas with vegetation	
<b>Perpetual Maintenance</b>	
Prevent soil from being washed onto pavement. Keep landscape areas well maintained.	Continually
Rake and remove fallen leaves and debris from deciduous trees and shrubs in areas that drain to pavement.	Annually or as needed
Remove debris and clear obstructions from overflow devices.	Annually or as needed
Mow grass in turf blocks to less than four inches and remove grass clippings. Avoid use of fertilizer and pesticides. Reseed bare spots.	Every week or every other week during growing season
Re-supply pervious material between modular pavements, which may include sand, gravel, or mulch.	Annually or as needed
Vacuum sweep porous pavement.	2-3 times per year
If ponding persists, clogged concrete and asphalt should be replaced with new pervious pavement.	As needed
<b>BMP: Bioretention</b>	<b>Frequency</b>
<b>Initial Maintenance</b>	
Water plants daily for two weeks.	Daily
Water plants weekly for first growing season.	Weekly
Weed once monthly during the first two growing seasons.	Monthly, Seasonally
<b>Perpetual Maintenance</b>	
Remove litter and debris.	Monthly
Remove sediment.	As needed
Remulch void areas.	As needed
Treat diseased trees and shrubs.	As needed
Mow turf areas to keep grass 3-4 inches tall.	Seasonally, as needed.
Repair erosion at inflow points.	As needed
Repair outflow structures.	As needed
Unclog underdrain.	As needed
Regulate soil pH.	As needed
Remove and replace dead and diseased vegetation.	Semiannually
Replace tree stakes and wires until trees are established (atleast first 3 years).	Annually
Replace mulch every 2-3 years prior to wet season.	Every 2-3 years

<b>BMP: Rain Garden</b>	<b>Frequency</b>
<b>Initial Maintenance</b>	
Water plants daily for two weeks.	Daily
Water plants weekly for first growing season.	Weekly
Weed once monthly during the first two growing seasons.	Monthly, Seasonally
<b>Perpetual Maintenance</b>	
Remove litter and debris.	Monthly
Remove sediment.	As needed
Remulch void areas.	As needed
Treat diseased trees and shrubs.	As needed
Repair erosion at inflow points.	As needed
Repair outflow structures.	As needed
Regulate soil pH.	As needed
Aerate soil.	Semiannually
Remove and replace dead and diseased vegetation.	Semiannually
Replace tree stakes and wires until trees are established (atleast first 3 years).	Annually
Replace hardwood mulch every 2-3 years prior to wet season.	Every 2-3 years
<b>BMP: Wetlands</b>	<b>Frequency</b>
<b>Initial Maintenance</b>	
Repair any problem which could cause clogging.	As needed
Weed once monthly during the first two growing seasons.	Monthly, Seasonally
<b>Perpetual Maintenance</b>	
Stabilize eroded banks	As needed
Repair undercut and eroded areas at inflow and outflow structures.	As needed
Maintain access to the basin for regular maintenance activities.	As needed
Mow as appropriate for vegetative cover species.	As needed, seasonally
Monitor health of vegetation and replace as necessary.	As needed
Control mosquitoes as necessary.	As needed
Remove litter and debris.	As needed
Remove vegetation near end of each growth season to capture the nutrients and pollutants removed by the wetland vegetation.	Annually
Replant eroded or barren spots to prevent erosion and accumulation of sediment.	Semi-annually
Scrape bottom and remove sediment to restore original cross-section. Properly dispose of sediment.	Every 3-5 years
<b>BMP: Ponds and Lakes</b>	<b>Frequency</b>
<b>Initial Maintenance</b>	

<b>(NOT A REQUIREMENT)</b> Introduce fish to enhance natural mosquito and midge control and regularly maintain emergent and shoreline vegetation to provide access for inspection and to facilitate vector (tick and mosquito) control. Consult with conservation department for fish species.	As needed
<b>Perpetual Maintenance</b>	
Control mosquitoes as necessary.	As needed
Repair undercut and eroded areas at inflow, outflow, and banks.	As needed
Maintain access to the basin for regular maintenance activities.	As needed
Remove sediment from outlet structure. Dispose of properly.	As needed
Maintain protected vegetated buffer around pond. Mow side slopes and maintain vegetation in and around basin to prevent any erosion or aesthetic problems. Minimize use of fertilizers and pesticides. Reseed if necessary.	Seasonally, as needed.
Remove litter and debris.	As needed
Manage and harvest wetland plants.	Annually
Perform structural repair or replacement when needed.	As needed
Remove sediment from the forebay and regrade when the accumulated sediment volume exceeds 10-20% of the forebay volume. Clean in early spring and reseed so vegetation damaged during cleaning has time to re-establish	5-7 years
Remove sediment when the permanent pool volume has become reduced significantly (sediment accumulation exceeds 25% of design depth), resuspension is observed, or the pond becomes eutrophic (too much algae growth).	20 years, or when needed
<b>BMP: Dry Detention Basins</b>	<b>Frequency</b>
<b>Perpetual Maintenance</b>	
Control mosquitoes as necessary.	As needed
If necessary, modify the outlet orifice to achieve design values if inspection indicates modifications are necessary.	As needed
Repair undercut or eroded areas.	As needed
Mow turf areas to keep grass 3-4 inches tall.	Seasonally, as needed.
Manage pesticides and nutrients.	As needed
Remove litter and debris.	Monthly
Trim tall vegetation at the beginning and end of the wet season to prevent establishment of woody vegetation and for aesthetic reasons.	Semiannually
Seed or sod to restore dead or damaged ground cover	Annually, as needed
Supplement wetland plants if a significant portion have not been established (at least 50% of the surface area).	Annually

Remove nuisance plant species.	Annually
Remove sediment from the forebay to restore design depth.	3-5 years
Monitor sediment accumulation and remove accumulated sediment and regrade about every 10 years or when the accumulated sediment volume exceeds 10-20% of the basin volume, or when accumulation reaches 6 inches or if resuspension is observed. Clean in early spring so vegetation damaged during cleaning has time to re-establish.	10-25 years